Savage, Daniel J

From: Feather, William G
Sent: Thursday, April 19, 2018 9:41 AM
To: Savage, Daniel J
Subject: RE: WE43
Attachments: WE43_sim4_curves_T6.pptx

Attached is Malian's final fitting parameters, The changes I'm making should only effect the high strain rate cases so these initial values should be final. I think this is what you're asking for, let me know if you need anything else.

Will

α – slip mode	Basal slip	Prismatic slip	Pyramidal slip
$\tau_{0,f}^{\alpha}$ [MPa]	30	70	215
k_1^{α} [m^{-1}]	6.4×10^{7}	2.75×10^{8}	1×10^{8}
g^{α}	3.8×10^{-3}	3.1×10^{-3}	1.58×10^{-3}
D^{α} [MPa]	245	250	295
q^{α} [MPa]	120	200	280
H_1^{α} [MPa]	0.1	0.025	0.05
H_2^{α} [MPa]	0.05	0.05	0.03
H_3^{α} [MPa]	0.05	0.08	0.08

β – twin mode	Extension twins I $\{10\bar{1}2\}\langle 10\bar{1}1\rangle$	Extension twins II $\{11\bar{2}1\}\langle 11\bar{2}6\rangle$	Contraction twins $\{10\bar{1}1\}\langle 10\bar{1}2\rangle$
τ_{crit}^{β} [MPa]	111	113	195
τ_{prop}^{β} [MPa]	96	91	180
τ_0^{β} [MPa]	110	125	210
H_0^{β} [MPa$\sqrt{\mu m}$]	30	30	85
$C^{\alpha\beta}, \alpha = 1$	2×10^{4}	4.5×10^{4}	4.5×10^{3}
$C^{\alpha\beta}, \alpha = 2$	8.5×10^{4}	8×10^{4}	4.7×10^{4}
$C^{\alpha\beta}, \alpha = 3$	7×10^{3}	1×10^{4}	1×10^{4}

From: Savage, Daniel J
Sent: Thursday, April 19, 2018 8:56 AM
To: Feather, William G <wgf1@wildcats.unh.edu>
Subject: WE43

Hey Will,

Can you send me your best estimate of slip CRSS for the relevant slip and twin modes? I'm doing ebsd analysis and need ballpark values to compute the maximum effective Schmid factor.

Thanks,
Dan